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| APPLICATION NO.                             | FILING DATE    | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.     | CONFIRMATION NO. |
|---|----------------|----------------------|-------------------------|------------------|
| 10/030,609                                  | 04/29/2002     | Mika Aalto           | 4925-196PUS             | 8358             |
| 7:  | 590 09/27/2005 |                      | EXAMINER                |                  |
| Michael C Stuart                            |                |                      | PHILLIPS, HASSAN A      |                  |
| Cohen Pontani Lieberman & Pavane Suite 1210 |                |                      | ART UNIT                | PAPER NUMBER     |
| 551 Fifth Avenue                            |                |                      | 2151                    |                  |
| New York, NY 10176                          |                |                      | DATE MAILED: 09/27/2005 |                  |

Please find below and/or attached an Office communication concerning this application or proceeding.

|   | Application No.  | Applicant(s) |  |  |  |  |
|---|--|--------------|--|--|--|--|
| Office Action Commence  | 10/030,609   | AALTO ET AL. |  |  |  |  |
| Office Action Summary   | Examiner   | Art Unit     |  |  |  |  |
|   | Hassan Phillips  | 2151         |  |  |  |  |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply  |  |              |  |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). |  |              |  |  |  |  |
| Status  |  |              |  |  |  |  |
| 1) Responsive to communication(s) filed on 29 April 2002.   |  |              |  |  |  |  |
| •   | <u> </u>   |              |  |  |  |  |
| ,   | 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is |              |  |  |  |  |
| closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.   |  |              |  |  |  |  |
| Disposition of Claims   |  |              |  |  |  |  |
| 4) Claim(s) <u>1-20</u> is/are pending in the application.  |  |              |  |  |  |  |
| 4a) Of the above claim(s) is/are withdrawn from consideration.  |  |              |  |  |  |  |
| 5) Claim(s) is/are allowed.   |  |              |  |  |  |  |
| 6)⊠ Claim(s) <u>1-20</u> is/are rejected.   |  |              |  |  |  |  |
| 7) Claim(s) is/are objected to.  8) Claim(s) are subject to restriction and/or  | r election requirement   |              |  |  |  |  |
| o) Claim(s) are subject to restriction and/or   | election requirement.  |              |  |  |  |  |
| Application Papers  |  |              |  |  |  |  |
| 9) The specification is objected to by the Examiner.  |  |              |  |  |  |  |
| 10) $\boxtimes$ The drawing(s) filed on 29 April 2002 is/are: a)  |  |              |  |  |  |  |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).   |  |              |  |  |  |  |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.  |  |              |  |  |  |  |
|   |  |              |  |  |  |  |
| Priority under 35 U.S.C. § 119  |  |              |  |  |  |  |
| 12)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  |  |              |  |  |  |  |
| a)⊠ All b)□ Some * c)□ None of:  1.⊠ Certified copies of the priority documents have been received.   |  |              |  |  |  |  |
| 2. Certified copies of the priority documents have been received in Application No  |  |              |  |  |  |  |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage   |  |              |  |  |  |  |
| application from the International Bureau (PCT Rule 17.2(a)).   |  |              |  |  |  |  |
| * See the attached detailed Office action for a list of the certified copies not received.  |  |              |  |  |  |  |
|   |  |              |  |  |  |  |
|   |  |              |  |  |  |  |
| Attachment(s)   |  |              |  |  |  |  |
| 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 4) Interview Summary (PTO-413) Paper No(s)/Mail Date  |  |              |  |  |  |  |
| 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  5) Notice of Informal Patent Application (PTO-152)  |  |              |  |  |  |  |
| Paper No(s)/Mail Date <u>12/16/02</u> . 6) Other:   |  |              |  |  |  |  |

#### **DETAILED ACTION**

1. This action is in response to communications filed on April 29, 2002.

#### Information Disclosure Statement

2. The information disclosure statements filed on December 16, 2002, and January 9, 2002, have been received and considered by the Examiner.

## Specification

3. The abstract of the disclosure is objected to because the heading should read, "Abstract" or "Abstract of the Disclosure". The abstract is also objected to for undue length. Correction is required. See MPEP § 608.01(b).

# Claim Objections

4. Claim 1 is objected to because of the following informalities: Examiner feels the interface identifier (I6), for network element (A), in line 4 of the claim should instead be (I5). Appropriate correction is required.

## Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the

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applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

- 6. Claims 1-13, 15-20, are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Gai et al. (hereinafter Gai), U.S. Patent 6,697,360.
- 7. In considering claims 1 and 8, Gai teaches a method for an automatic assignment of IP (internet protocol) addresses to the interfaces of network elements (210-216), especially routers, having at least two interfaces (202-207), by one of which they are newly connected, either directly or via other network elements (210-216), to a server (220, 222) of an IP based network, characterized in that the method comprises the steps of:
- a) checking by said new network element, which of its interfaces is connected to the server, (col. 9, lines 1-12, col. 10, line 58-col. 11, line12);
- b) said new network element sending a configuration request via its interface linked to the server, (col. 9, lines 1-12);
- c) the server of the network receiving the request, choosing and reserving as many IP addresses as needed for the new network element, and sending out a response with said IP addresses to the new network element (col. 9, line 21-col. 10, line 8);
- d) the new network element receiving said IP addresses and applying them on its interfaces requiring an address, (col. 10, line 19-col. 11, line 12).

- 8. In considering claims 2 and 15, Gai teaches the new network element is connected to the server via other network elements (210-216), said other network elements comprising at least two interfaces and a relay function for the address reservation protocol, the relay function knowing the location in particular the IP address of the server, (col. 9, lines 12-20).
- 9. In considering claims 3 and 16, Gai teaches the new network element starts its relay functionality after at least one IP address or IP network address has been assigned, (col. 12, lines 44-61).
- 10. In considering claims 4 and 17, Gai teaches additional information or parameters are included in the server's response to a configuration request from a new network element beside the IP address, either by the server or by the relay of a network element the response has to pass, (col. 9, lines 47-65).
- 11. In considering claims 5 and 18, Gai teaches all network elements of the network that are routers run a routing protocol to exchange routing information in particular an Open Shortest Path First(OSPF) routing protocol, (col. 12, lines 25-43).
- 12. In considering claims 6 and 19, Gai teaches if the new network element comprises interfaces for numbered links, in particular for Logical IP Subnetworks (LIS)

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the new network element requests an IP network address for each of those interfaces from the server, (col. 9, lines 1-12).

13. In considering claims 7 and 20, Gai teaches if the new network element only comprises interfaces for unnumbered links, the new network element requests only one IP host address from the server, (col. 8, lines 18-39, col. 9, lines 1-12).

14. In considering claim 9, Gai each network element with more than one interface comprises a client for checking if its interfaces are connected directly or via another network element to the server and for sending a configuration request to the server, in that each network element with more than one interface comprises a relay for forwarding configuration requests coming in via one of the interfaces via another one of the interfaces, and in that the server comprises means for choosing and reserving IP addresses for a network element newly included in the network in response to a received configuration request from this new network element, (col. 7, line 56-col. 10, line 57).

15. In considering claim 10, Gai teaches it is suitable for using the Dynamic Host Configuration Protocol (DHCP) for assigning IP addresses to the interfaces of the new network elements, in particular to IP hosts, (col. 7, lines 6-22).

16. In considering claim 11, Gai teaches the network is made up of point-to-point links between the network elements, (col. 7, line 66-col. 8, line 7).

17. In considering claim 12, Gai teaches the server has access to a database, in particular a database maintained by the server indicating which IP addresses are allocated and which IP addresses are available, (col. 10, lines 32-57).

18. In considering claim 13, it is inherent in the teachings of Gai that the server has access to a database, in particular a domain name service (DNS) database, in which all reserved IP addresses are related to the name of the network element to which the IP address is assigned, (col. 3, lines 7-24, col. 10, line 32-col.11, line 30).

# Claim Rejections - 35 USC § 103

- 19. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 20. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gai in view of Schnaidt.

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21. In considering, claim 14, although the teachings of Gai disclose substantial features of the claimed invention, they fail to expressly disclose: ATM being used as data link layer.

Nevertheless, ATM used as data link layer was well known in the art at the time of the present invention. This is shown in the teachings of Schnaidt. More specifically, Schnaidt teaches ATM being used as data link layer, (page 3, paragraph 6).

Thus, it would have been obvious to a person of ordinary skill in the art to modify the teachings of Gai to show ATM being used as data link layer. This would have advantageously provided high bandwidth service capable of carrying data, voice, and video over great distances, (Schnaidt, page 1, paragraph 3).

### Conclusion

22. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hassan Phillips whose telephone number is (571) 272-3940. The examiner can normally be reached on M-F 8:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Zarni Maung can be reached on (571) 272-3939. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

HP/ 9/22/05

SUPERVISORY PATENT EXAMINE